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D. Scott
6-8-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application of)

AOKI)

Application Number: -10/082,338)

Filed: February 26, 2002)

For: SEMICONDUCTOR LASER)

ATTORNEY DOCKET NO. ASAM.0042)

Honorable Assistant Commissioner
for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Applicant has amended the specification in order to correct an error in accordance with standard U.S. practice. Prior to an examination on the merits, please amend the above-identified application as follows:

IN THE SPECIFICATION

Please substitute the second paragraph which starts on page 1 and continues to page 2 with the following amended paragraph:

B1

It is known theoretically and experimentally that by reducing a resonator length of an end light emitting type semiconductor laser down to 200 micrometers, it is possible to lower a threshold value current flow and increase a mitigation oscillation frequency. Fig. 1 shows a calculation example of resonator-length-dependency of the laser threshold value current, mitigation oscillation frequency, and series resistance. A laser active layer is assumed to have a lattice-distortion-based InGaAsP multi-quantum well structure. From this figure, it is clear that the short resonator is advantageous for lowering a threshold value current and increase a mitigation oscillation frequency. However, when the resonator becomes shorter, the